

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CLXXXVI.

A REVIEW OF THE GENUS *STYLOTRICHUM*.

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As in the case of other genera endemic to Bahia, material of *Stylotrichum* has accumulated slowly during the last hundred and fifty years, and species concepts have not been adequately tested. The first species known was *Agrianthus corymbosus* DC. based on a Blanchet collection. The species was transferred at one point to *Ageratum* (Baker, 1876), but eventually was placed in the new genus, *Stylotrichum*, by Mattfeld (1924) along with a second species that was described as new. Barroso (1957) has recently added a third species. A review of the genus has been occasioned by the need to identify some new collections, and the effort has been aided by the opportunity to examine typical material of all three previously described species.

Stylotrichum is rather distinctive in habit with crowded spreading spirally inserted leaves and abrupt corymbose inflorescences on the ends of the branches. The members of the genus have been spared inclusion in the broad concept of *Eupatorium* that was suffered by closely related genera, because the members all have a reduced pappus. The genus is named after its most unique feature, the dense spreading pubescence that covers most of the shaft of the style. All the species also share a rather distinctive form of pubescence on the stems, peduncles and even the corolla, unlike that in related genera. The majority of the hairs are a smaller variation of what might be generally termed the *Hieraceum*-type, being biseriate with a triangular shape tapering to the tip which often bears a minute gland. The outer walls are somewhat thickened while the walls between the two rows of cells are thin and form a variably zigzag line. The corollas tend to be short compared to their width, and in spite of one indication to the contrary, the flowers of all the species are apparently whitish.

The review of material has shown four species in the genus, the most distinct being previously undescribed. All three previously known species have been maintained, though the differences require clarification. The present concepts indicate some geographical differentiation within Bahia, but this is based on very few collections.

Stylotrichum corymbosum (DC) Mattf. occurs in north-central Bahia around Jacobina. The leaves have been described as sessile, being narrowly obovate and evenly tapering to the base. The glandular punctations are reddish, being particularly noticeable

on the upper part of the corollas and on the upper surfaces of the leaves. The setae of the pappus are mostly 0.6-1.0 mm long, and the carpopodium is not distinctly enlarged. The hairs of the corolla are almost all with small glandular tips. The anther thecae examined are mostly pale while those of the other species are distinctly reddish. Two collections have been seen, *Blanchet 2535* (isotype US) and *Schery 669* (US).

Stylotrichum edmundoi Barroso is known from Morro do Chapéu in north-central Bahia. The leaves are short, about 5 mm long, obovate, and constricted below into a short petiole. The glandular punctations are pale, and none have been seen on the upper surfaces of the leaves. The setae of the pappus are mostly 0.6-1.0 mm long, and the carpopodium is moderately enlarged, having a slight upper rim. The corolla has some scattered hairs of the corolla with narrowly pointed non-glandular tips. The species is the only member of the genus seen in which there are no capitate glands among the hairs on the upper shaft of the styles or on the backs of the stigmatic portion of the style branches. Two specimens have been seen: *Edmundo Pereira 2010* (isotype US); and *Duarte 9204-E.Pereira 10114* (US).

Stylotrichum rotundifolium Mattf. occurs in south-central Bahia near "Bom Jesus" and near Mucugê. The leaves have nearly orbicular blades up to 2 cm broad on very short petioles. The glandular punctations are pale. The setae of the pappus are 0.3-0.5 mm long with the apical cells often very blunt-tipped. The carpopodium is the largest in the genus with a prominent upper rim. The corolla has numerous hairs without glandular tips. The setae on the achene vary in length but seem to differ from the other species of the genus by almost always having one of the two apical cell-tips greatly exceeding the other in length. Three collections have been seen: *Ldtzelberg 299* (isotype M); *King et al. 8149* (CEPEC, RB, US) with only smaller upper leaves present; and *Duarte 9361-E.Pereira 10074* (US), a specimen lacking inflorescences from somewhat farther north near Lençóis.

STYLOTRICHUM SUCREI R. M. King and H. Robinson, sp. nov.
Plantae herbaceae? erectae 30-40 cm altae pauce pauce ramosae in caulis paginis superioribus et inferioribus foliorum pedunculis et squamis involucri dense stipitato-glanduliferae. Caules teretes striati. Folia spiraliter inserta, petiolis 2-3 mm longis; laminae late obovatae 10-13 mm longae et 6-10 mm latae base acute cuneatae margine superiore distincte crenulatae apice rotundatae supra et subtus dense stipitato-glanduliferae subtus in nervis et nervulis valde prominulis, nervis secundariis pauce ascendentibus subtrinervatis. Inflorescentiae laxae corymbosae base subumbellatae, ramis ultimis 1-3 cm longis. Capitula ca. 6 mm alta et 7 mm lata; squamae involucri ca. 25 eximbricatae subaequilongae oblanceolatae vel lineares ca. 5 mm longae apice breviter acutae extus bicostatae dense stipitato-glanduliferae et glandulo-punctatae; receptacula distincte conica glabra. Flores

ca. 50 in capitulo; corollae albae? 2.7-3.0 mm longae extus inferne dense stipitato-glanduliferae superne pallide glandulopunctatae, tubis ca. 1 mm longis, faucibus 1.5-1.7 mm longis distincte infundibularibus, lobis late triangularibus ca. 0.4 mm longis et 0.5 mm latis; thecae antherarum distincte lavandulae ca. 0.9 mm longae; appendices antherarum ca. 0.1 mm longae et 0.25 mm latae; rami stylorum inferne extus glanduliferi. Achaenia 2.5-2.7 mm longa plerumque in costis dense paxilliformiter setifera inter costas glandulo-punctata; carpodia valde prominentia annuliformia; pappus nullus. Grana pollinis 23-25 μm in diam. breviter spinulifera.

TYPE: BRASIL: Bahia: Andarai, sobre pedros, heliofita.

Dimitri Sucre 10853 (Holotype RB, isotype US).

The new species is strikingly distinct from the other three known members of the genus. The hairs of the stems, leaves and peduncles have glandular tips while the hairs of the other species do not. The upper surfaces of the leaves are densely pubescent while the leaves of the other species have only a few hairs on the main veins. The corollas are longer and more funnel-form, while in the other species the corollas are scarcely narrower below. It is the achene that is most distinct, lacking a pappus, bearing a short and very broad annuliform carpodium, and bearing unique peg-like setae having rounded tips. Still, in all basic characters, including the prominent net-veining of the leaf undersurface and the stout somewhat curved achenes, the species is like other members of the genus.

Literature Cited

- Barroso, G. M. 1957. Compositae-O gênero *Stylotrichum* Mattfeld. Arquivos do Jardim Botânico do Rio de Janeiro. 15: 23-25, pl. 1-3.
- Mattfeld, J. 1923. Compositae. In R. Pilger. Plantae Lützelburgianae brasiliensis I. Notizbl. botanisch. Gart. Berl. 8: 428-451.



JARDIM BOTÂNICO DO RIO DE JANEIRO

Herb. N.º

Fam.

Stylotrichum sucrei R.M. King & H. Robinson n. sp. Type

Proced.

Obs.

Col.

Det. p.

Data

Data

UNITED STATES

2553675

NATIONAL HERBARIUM

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Stylotrichum sucrei R. M. King & H. Robinson, isotype, United States National Herbarium. Photo by Victor E. Krantz, Staff Photographer, National Museum of Natural History.